Numbers to words

|  |
| --- |
| #include<stdio.h> |
|  | #include<string.h> |
|  | void read(char n[],char str[],int a) |
|  | { |
|  | int i=0; |
|  | char digit[10][10]={"ONE ","TWO ","THREE ","FOUR ","FIVE ","SIX ","SEVEN ","EIGHT ","NINE "}; |
|  | char s[10][10]={"TEN ","ELEVEN ","TWELVE ","THIRTEEN ","FOURTEEN ","FIFTEEN ","SIXTEEN ","SEVENTEEN ","EIGHTEEN ","NINETEEN "}; |
|  | char q[10][10]={"TWENTY ","THIRTY ","FOURTY ","FIFTY ","SIXTY ","SEVENTY ","EIGHTY ","NINETY "}; |
|  | while(a) |
|  | { |
|  | if(a==3|a==1) |
|  | { |
|  | a--; |
|  | strcat(str,digit[n[i]-49]); |
|  | i++; |
|  | if(a==2 & n[i-1]!='0') |
|  | strcat(str,"HUNDRED "); |
|  | } |
|  | if(a==2) |
|  | { |
|  | a--; |
|  | if(n[i]=='1') |
|  | { |
|  | i++; |
|  | strcat(str,s[n[i]-48]); |
|  | a--; |
|  | } |
|  | else |
|  | { |
|  | strcat(str,q[n[i]-50]); |
|  | i++; |
|  | } |
|  |  |
|  | } |
|  | } |
|  |  |
|  | } |
|  |  |
|  | void read1(char n[],char str[]) |
|  | { |
|  | char b[10][10]={"","THOUSAND ","MILLION ","BILLION ","TRILLION ","QUADRILLION ","SEXTILLION ","SEPTILLION ","OCTILLION ","NONILLION","DECILLION"}; |
|  | int d=strlen(n); |
|  | while(d) |
|  | { |
|  | if(d%3==0) |
|  | { |
|  | read(n,str,3); |
|  | d=d-3; |
|  | n=n+3; |
|  | // printf("%c\n",n[0]); |
|  | } |
|  | else |
|  | { |
|  | read(n,str,d%3); |
|  | n=n+(d%3); |
|  | d=d-(d%3); |
|  |  |
|  | // printf("%s\n",n); |
|  | } |
|  | if((str[strlen(str)-2]=='N')&(str[strlen(str)-3]=='O')) |
|  | {} |
|  | else |
|  | strcat(str,b[d/3]); |
|  | } |
|  |  |
|  | } |
|  | main() |
|  | { |
|  | char n[100],str[100]="\0"; |
|  | int i=0; |
|  | while((n[i]=getchar())!='\n') |
|  | { |
|  | if(!isdigit(n[i])) |
|  | { |
|  | n[i]='\0'; |
|  | break; |
|  | } |
|  | i++; |
|  | } |
|  |  |
|  | if(n[i]=='\n') |
|  | n[i]='\0'; |
|  |  |
|  | if(n[0]=='0') |
|  | printf("ZERO\n"); |
|  | else |
|  | { |
|  | read1(n,str); |
|  | printf("%s\n",str); |
|  | } |
|  | } |